

Claims:

1. A method of assembling cells for use in a cell relay network, comprising the steps of creating a template data structure representing the structure of a cell to be assembled, storing said template data structure in memory, and creating cells by retrieving said  
5 template data structures and inserting variable information therein.
2. A method as claimed in claim 1, wherein a pointer table stores the location of said data structures in memory.
3. A method as claimed in claim 2, wherein a separate pointer is provided for each virtual channel in the network.
- 10 4. A method as claimed in claim 1, wherein circular pointers control which circular buffers are associated with a virtual channel in said network.
5. A method as claimed in claim 4, wherein the circular buffer pointers to control the order in which data is placed in the cell payload.
6. A method as claimed in claim 1, wherein said template data structure is created by  
15 a program running on a central processing unit.
6. A method as claimed in claim 1, wherein in a DBCES service with a multiframe structure, re-sizing of the multiframe structure is carried out with the aid of a DBCES cell template.
7. A method as claimed in claim 6, for use in an SDT DBCES (Structured Data  
20 Transfer Dynamic Bandwidth Circuit Emulation) service, wherein the DBCES data structure has three major regions, namely a first region containing information that does not change when the multiframe structure is re-sized, and two regions containing information that changes during multiframe resize.
8. A method as claimed in claim 1, wherein said cells are Unstructured Data Transfer  
25 (UDT), Structured Data transfer (SDT), or DSS (Dynamic Structure sizing) cells.
9. A device for assembling cells from a data stream for transmission over a cell relay network, comprising:  
a memory storing a template data structure representing the structure of a cell to be assembled; and

a segmentation unit for retrieving said template data structure from said memory and creating cells by inserting variable information therein.

10. A device as claimed in claim 9, wherein said memory is connected to a microprocessor controlling the operation thereof.

5 11. A device as claimed in claim 9, further comprising a pointer table storing the location of said data structures in said memory.

12. A device as claimed in claim 9, further comprising circular buffers associated with virtual channels in said network, and circular pointers for controlling which circular buffers are associated with which channels.

10 13. A device as claimed in claim 9, wherein the circular buffer pointers control the order in which data is placed in the cell payload.

14. A device as claimed in any claim 9, further comprising a central processing unit connected to said memory and controlling the operation thereof.

15. The use of cell template data structures to form ATM cells.